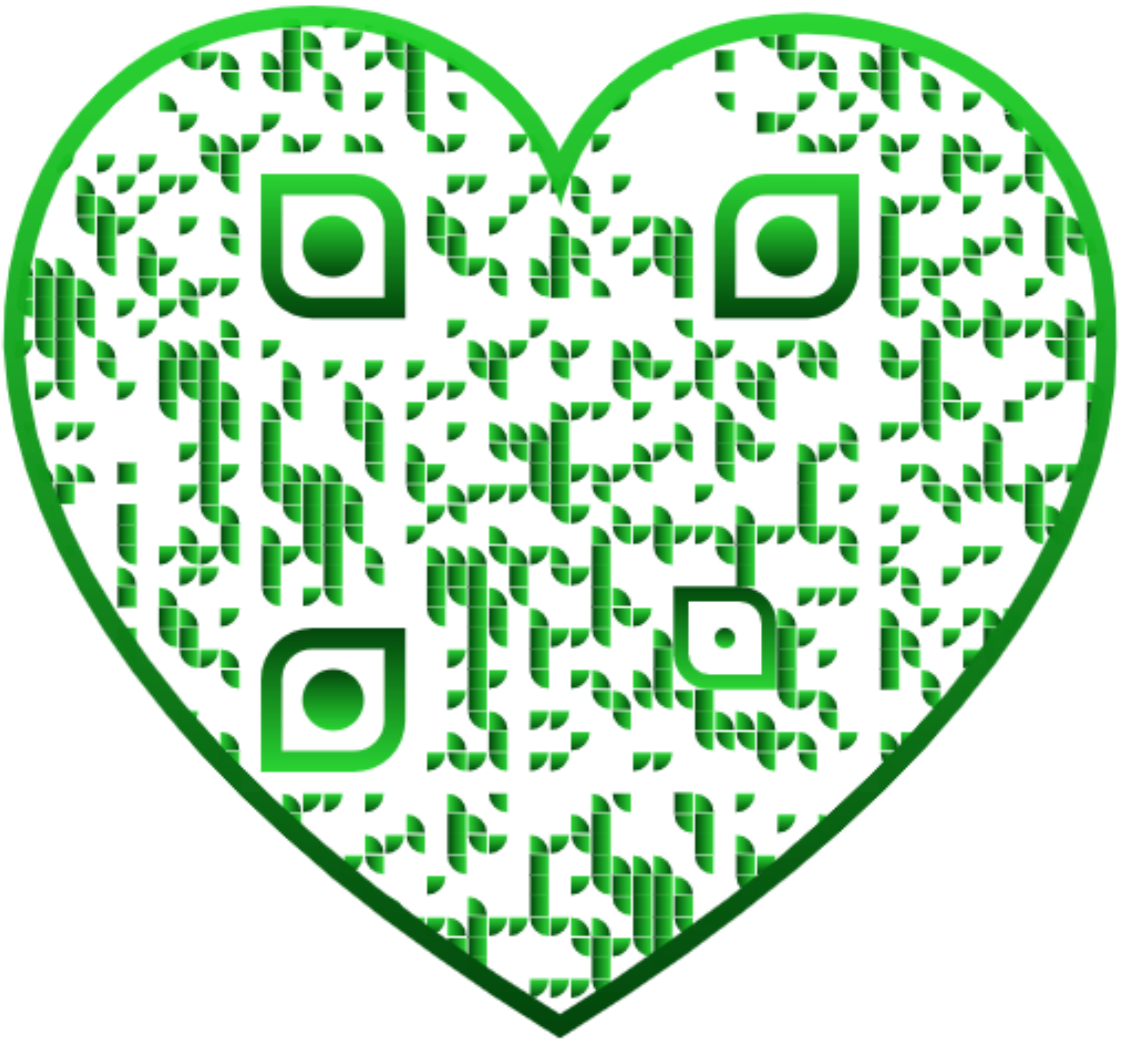
EUGENE CHARLTON

GROWING MUSHROOMS for Profit

Running a farm in 28 weeks



Growing mushrooms

How to start a mushroom farm for profit in 28 Weeks

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Chapter 1 – Introduction

The following book is focused on the idea of starting a mushroom farm, to make a profit. This book will provide all the knowledge and guidelines which an individual should have, to start farming mushrooms and make some cash out of it. The information provided in this book has been obtained from authorized sources, which should provide sufficient knowledge about mushroom farming to help you succeed.

Each chapter in this book discusses some of the required knowledge and steps related to starting a mushroom farm. From the first chapter until the last, this book focuses on every important aspect of mushroom farming along with the required planning. This Introduction Chapter will discuss the current state of mushroom farms in this current era, followed by the development of mushroom farming in recent years. The chapters thereafter will focus on how to start a mushroom farm, what you need to know when starting a mushroom farm, planning stage, mushroom growth habits, growing areas and equipment, making a profit by farming mushrooms and a conclusion chapter.

Mushrooms have been harvested largely for food and medicine from the wild for thousands of years. There are at least 1.5 million species of fungi and from those around 10000 are mushrooms. The world's supply of mushrooms comes from commercial farmers even though harvesting of wild mushrooms is still ongoing today. White button mushrooms (Agaricus spp.) were first cultivated in France around 1650; these were best known to Americans and Europeans at the time. The first cultivation of shiitake (Lentinula does) mushrooms were done by the Chinese people in 1100 AD. Around the 1180s the United States began its commercial production and Agaricus mushrooms made up 99 per cent of mushroom production by 1997. The Oyster mushrooms (Pleurotus spp.) were domestically grown very recently and it is ranked second in the world production wise and the third-ranked type is the Shiitake mushroom which is particularly well-liked by Asians. Recently straw and wood ear mushrooms started becoming popular. However, out of around 300 mushrooms that are edible, only 30 have been domesticated and of those only 10 are grown commercially. Currently, 70 per cent of the world's mushroom production consists of Button, oyster, and shiitake mushrooms.

Mushroom production has increased twenty-fold in the past 30 years and most of it started around the 1980s and 1990s. Other than Agaricus the demand for speciality mushrooms has been strong.

Growing mushrooms is the best option if you have limited outdoor space and are living in a condo or townhouse and want to grow something for a profit. This gives the best return on investment in the long run. Mushrooms can be easily grown indoors and without soil and hence, are the best choice when it comes to growing something with limited space.

Plants usually grow in the ground and need proper sunlight and watering but mushrooms can be grown in straw or sawdust and require no sunlight. This makes mushrooms the perfect choice for people who are looking to make a profit and do not have enough outdoor ground space to implement growing other types of plants.

People who enjoy manual labour and enjoy interacting with people are the most suitable type of person for running a mushroom business as it requires a lot of manual labour and the ability to connect with people gives the mushroom farmer an edge in terms of presenting products to potential customers.

It is possible to run the mushroom farm as a part-time business as it requires minimal attention daily and is not demanding on your time or energy. They can be given attention at any time of the day and it is easy to maintain a mushroom farm along with your other obligations.

As a small scale mushroom farmer, you would need to make weekly deliveries to your clients in order to make a reasonable profit. Being able to supply your clients regularly and reliably on a weekly basis will ensure you are popular with your customers. To get an idea of your target market, visit large cities within a 75-mile radius and research health food stores, supermarkets, farmers' markets, and restaurants, make a list of the mushrooms they use and have their details written down along with detail such as prices they currently pay and their weekly demand etc.

Oriental restaurants get their shiitake mushroom as dried products at low cost from China, Japan, or Taiwan. Expensive Japanese restaurants are different and are occasionally delighted to get the locally produced fresh mushrooms, so check with any local restaurants to get an idea of their requirements.

European-style restaurants or companies, cafeterias, hotels etc. are some of the best prospects for selling your mushrooms. Try talking to the business owner, head of purchasing or even the chef and advise them of your fresh products that you could possibly supply at better prices than they are currently paying. This will be a good way to gauge interest. It is also a good idea to offer your potential client a sample of your mushrooms so they can judge the quality of the goods you are offering, If you are a local grower and might reach your total production capacity in just a year the best questions to ask your potential clients are: Do they like locally-grown fresh products such as good quality shiitake mushrooms or other typed of mushrooms, how many times a week do they need delivery and what their potential order quantity will be? This will then allow you to judge how many customers you can comfortably supply.

Chapter 2 – Starting a Mushroom Farm

A proper mushroom farming business can lead to s decent income in just a few weeks. Also, it is pretty easy to make profits if you are growing oyster mushrooms or similar high demand mushrooms. Below are six easy steps on how to start your mushroom business.

1. Get your spawn and substrate

First, you have to have a spawn to begin the culture. It is possible to produce your own spawn with a sterilized culture or you can simply buy the ready-to-inject spawn you can buy from dealers. However later on making your own might be more cost-effective. Nonetheless, the start-up costs can be high, so the best solution is to buy the ready-to-inject spawn. The substrate needs to be purchased as well. A lot of the mushroom farmers use straw or wood chips. The preferred method is to use a straw. You need a straw that can be cut up into small pieces.

2. Prepare the substrate

Once you have the spawn ready you need to cut the straw into small pieces. Wet the straw. Warm up the straw in hot water and continue boiling for half an hour then remove the straw needs and leave it to drain. Lastly, lay out the straw on a hygienic surface and leave it to cool down.

3. Pack the plastic bags

After that is done pack plastic bags with the straw and spawn inside. They need to be packed with at least two or three inches of straw inside the plastic bag. After that is done the spawn need to be sprayed over it. Continue this process in layers until the bag is full. Then secure the top and make some puncture holes in the bag.

4. Incubation

Finally, it is time for incubation. The growing area needs to be at 78 degrees F. Place the bags on a shelving unit. Make sure that the room is dark and no outside sunlight is getting into the room. Cover up all windows and cracks. When you need to check the bags use red darkroom lights. When you start to see little pinhead mushrooms close to the punctures you made in your bag then it is time for the next step.

5. Fruiting

Your fruiting room needs to have a high level of moisture. The temperature needs to be set at 65 to 70 degrees F. But here you will need a lot of natural light unlike the incubation room and you need to have the light for around 12 hours each day. This is basically done to shock your mycelium to compel them to start fruiting. Once the fruiting starts, the bags need to be removed and the mix put in a cool place for a day, maybe a basement or any place that is cool. After that, they can be moved back to the fruiting room. Cutting off the bag will give the mushrooms space to grow.

6. Harvest

The final part is harvesting. Right before your mushroom caps are fully uncurled is the perfect time for the harvest. You need to twist the stem off from close to the growth medium. The Harvesting of your mushrooms is then complete. Perhaps start with Button mushrooms as they are one of the easy starter mushrooms to study the growing and harvesting procedure before you move on to the more expensive mushroom types. Once you can grow an assortment of mushrooms, you might find this type of gardening quite interesting,

Chapter 3 – Things to Know

Preparation

It is important to decide on a site that will have an air temperature of 55 to 70 degrees Fahrenheit and the humidity level of 80 to 95 per cent. Wood plank mushroom beds are needed if you are going to farm commercially. The specific size is needed is a minimum of 50 inches wide and 6 to 8 inches in depth. Look for a place that can accommodate your beds with a 1-inch-gaps underneath the planting boxes to facilitate the drainage and ventilation process. It is advised to use muck compost that has horse manure, hay, poultry manure, gypsum and ammonium nitrate in it for best results. Put layers of all the components into the planting beds and dampen them with water so that becomes like a moist sponge. Let the mixture compost for 14 days and wet it regularly and every three days turn it over and repeat.

Planting

Plant mushroom seeds on the matured compost mixture and keep it at a regular heat of 70 to 80 degrees Fahrenheit. The temperature will decrease the level of ammonia in the compost which prevents the spores from being killed off. Spread the spawn equally on top of the compost and blend it methodically into the medium. Mushroom spawns are accessible at most seed companies. They will also be able to give suggestions on the planting rate on the package depending on the type of mushrooms they are. Keep the mixture wet and cover up the beds with soggy newspapers and let the spores multiply. Put a casing that is made from equal parts like sphagnum and limestone over the top after the white fungus has started to peek through the top of the mixture. It is important to sprinkle warm water on top of the compost that will help the growth medium to stay moist and keep the humidity high.

Harvest

They are ready to harvest four weeks after adding the casing layer on top of the fungus growth. Small mushrooms are the first ones that can be seen, often known as “pins”. At this stage, the mushrooms are all set to pick and you can determine this by looking at the diameter that should be the same as the measurement of the stem. It is a good idea to harvest the mushrooms before the veil curls beneath the ceiling and stretches out. It is better to not pull them out but to twist the mushrooms at the bottom of the stem to pluck them from the growing medium.

Chapter 4 –Planning

Research Your Product

Individuals who plan to grow mushrooms must have a strong understanding of the biological requirements of mushrooms, along with the knowledge about which species is suitable for which environment, as several species are not suitable for several environments. Quite the opposite to green plants, mushrooms have a different life cycle, short refrigerated shelf life, and different pests. Mushroom production is pretty much dependent on critical moisture control, temperature control, light control, and air quality, which would be too unpredictable outdoors, and really costly to maintain indoors.

Market Conditions

Farmers farming mushrooms must be extremely mindful of their market. While full-time cultivators can commit to certain levels of mushroom generation as a full-time business, most small scale mushroom cultivation will probably only offer a small supplemental wage. Today's gourmet and vegetarian/vegan demand for organic, high-quality fresh produce allow for a larger market for your small to the large mushroom farming business. Be that as it may, you'll have to painstakingly research your own area for competition and potential income opportunities for your mushroom business. There is some potential for Web sales with delivery through the mail, but the fragility and short lifespan of the product after picking will limit your options through this platform.

Market Analysis

A careful investigation of your potential market is fundamental when deciding whether mushroom growing is likely to bring you a return on investment. Mail requests and Website orders will broaden your market; however, most cultivators should Research the potential for selling to privately owned restaurants and shops, coordinate sales at farmer's markets or on-site at your home. Consider offering your mushroom using various approaches and adjust your sales pitch to each of your market types to improve the potential for income. This may incorporate offering dried or canned mushrooms, samples, or pre-made mixtures such as soups and sauces as an example.

Chapter 5 – Mushroom Growth Habits

Each mushroom has a different growing habit. Some are grown individually and others grow in groups of two or more depending on their characteristics.

Mushrooms can be found occurring as a single fruiting body but these are left generally ignored when they are being selected for your quality research. This is because we know that by the time we get them back to the workstation and do all the procedures required for the notes such as dry it, cut it up and use it for microscopic studies by that time there may be only the small amount left over. This is more accurate for the small mushrooms. It will be helpful if you are experienced in the usual growth habits because if you have more knowledge of what species can be found where then you may choose to leave the singles when you are doing your research. Basically, a judgement call is important as one fruiting body is better than none.

White Mushrooms

White mushrooms grow from microscopic spores and not seeds. The plants that grow from spores are commonly known as fungus. A mushroom that is mature will be able to drop at least 16 billion spores. You need to put these into a sterilized atmosphere of a lab and then these can be utilized to infuse grains or seeds that will help in making a product called the spawn (seed).

Mushrooms have no chlorophyll; all the nutrients they get are from natural substances that they get from their growing medium. The medium is called the compost that is scientifically made by using different objects such as straw, corn cobs, cotton seed and cocoa seed hulls, gypsum and nitrogen supplements. Formulating the compost takes a minimum of one to two weeks. Then it is pasteurized and positioned on top of big trays. Then the spawn is put into the compost and they start growing in the specially made greenhouses or prepared rooms where the planter can control the heat and humidity according to the requirements.

After two to three weeks the compost is filled with the roots of the mushroom which is a kind of lacy white filaments known as mycelium. At that time a layer of pasteurized peat moss is spread on top of the compost. It is necessary to control the warmth of the compost and the dampness of the room in order for the mycelium to fully grow. Finally, you will be able to see small white extensions that form on the mycelium and push up through the peat moss. This is called pinning by the farmers. These pins then grow and become the mushroom caps. Basically, these are actually fruits of the plant same like a tomato that is the fruit of a tomato plant. After the peat moss is applied it takes around 17 to 25 days to produce mature mushrooms. Perfectly ripe mushrooms can differ from miniature buttons to big cap hence size cannot be considered as an indication of its maturity.

Crops are collected over a time span of many weeks. Once the process is over the greenhouse or room is cleaned and sterilized before the procedure can start again. The compost that is left is then sent for recycling for potting soil. The mushrooms that have been harvested are then put in carts, cooled, box up and shipped off promptly to the places they are required. These could be supermarkets, food processing plants, and restaurants. The complete process takes about four months that is from the time the planter starts to

prepare the compost until the mushrooms reach maturity when they can be harvested and shipped to markets.

Crimini Mushrooms

Most mushrooms are grown and harvested similarly. The crimini mushrooms use the same techniques like the white mushroom. As they come from a different strain of spores they have a dark colour and have a denser texture.

Portabella Mushrooms

Portabella mushrooms use the same process as the white mushrooms. The difference is the portabella is a mature crimini. So basically they are kept for another three to seven days after the time that the crimini mushrooms are harvested. Their growing period is longer and that is why portabellas develop larger caps ranging up to six inches in length.

Oyster Mushrooms

Oyster mushrooms like all other mushrooms are also grown in mushroom greenhouses however they need more moisture and cleaner air than the white variety. It is better to use a range of agricultural and wood waste products that includes hardwood chips, chopped cereal straws or corn cobs as they grow better on these mediums. After the growing medium is pasteurized and chilled, it is then immunized and mixed with spawn and stuffed into extended, tubular shaped plastic bags. In the bags, you need to make small holes so that it allows the mycelium to breathe and then you need to hang the bags in the growing rooms. After 14 days the mushrooms start to stick out through the openings in the bags and are ready for harvest. If the straw is used as a budding medium the substrate can be used as compost after mushroom production is completed.

Shiitake Mushrooms

Shiitake mushrooms were formerly cultivated on natural oak logs and this process took around two to four years before the mycelium colonize the wood adequately enough to produce fruiting. They were harvested on a seasonal basis, spring and fall for about six years. Recently oak sawdust was used and this medium was packed into poly bags then sterilized and spawn added and the bags then placed in ecologically controlled rooms. These are man-made “logs” which help to produce shiitakes in seven weeks. The total process from spawning to the harvesting completion only takes four months in comparison to the six-year cycle that is needed if natural logs are used.

Enoki Mushrooms

Nowadays with the help of technology, there is an automated system that fills up plastic bottles with the substrate, these are mostly ground corn cob pellets. Additionally, there are other ingredients added such as wheat bran and soybean meal. The bottles are uncontaminated, injected with the mushroom culture and positioned in growing houses. After the substrate is populated with mycelium the bottles are moved to an area where a plastic choker is attached to the opening of the bottle. The choker helps the mushrooms to grow up straight to help control carbon dioxide. Enokis require a colder environment of 45 degrees which is much lower in contrast to the growing temperatures needed for other mushroom types, which is about 60 degrees. After 90 days the mushrooms are ready for harvest. The chokers are removed and the Enokis are pulled out from the opening of the bottle and then packaged in shrink-wrapped bags. The left over the substrate is recycled as enokis only generate one set of fruiting bodies per crop.

Beech Mushrooms

Growing beech mushrooms is almost the same as growing enokis mushrooms. Bottles are sterilized, injected with the mushroom culture and then positioned in growing houses to allow the substrate to house the mycelium. The difference is that the beeches need to be heated up to 60 to 64 degrees in order for the culture to form completely and it takes 100 days to produce a mature crop. Once the mushrooms are matured enough they can be harvested and packaged for sale. The beeches also produce only one stock of fruiting bodies per crop and thus the remaining substrate is recycled as agribusiness products.

Maitake Mushrooms

The refined maitake begins as a mushroom “culture” that is a portion of mushroom tissue grown on a special sterilized surface in a Petri dish in a lab. That is then applied to make mushroom spawn which is a series of steps that leads to the making of a lot of mushroom tissue out of only a small portion. The mushroom spawn is taken to sow on to the maitake construction logs, which are made from sawdust enhanced with grain by-products such as bran. The logs go via a “spawn run” and there the mushroom spawn infiltrates the sawdust and supplements and binds them together into a solid mass. The time taken to go through this process is around 30 days. The logs are nurtured in unique mushroom houses that have the right temperature, humidity and air flow that are carefully controlled according to the requirements so that the mushrooms can grow with ease. Once the logs start to pin small mushrooms begin to form, then the logs are moved into “fruiting” houses which are also very prudently controlled to provide the most efficient environment for the growth of the mushrooms. Maitake also produces only one time and then the substrate is recycled into agribusiness products. The whole process from the lab to the harvest takes around 10 to 14 weeks.

Chapter 6 – Growing Areas and Basic Equipment's

In desperate times people will eat anything and everything. Mushrooms are widely acknowledged as a good source of food but trying to eat them directly from the wild can be very hazardous.

However, opening your own mushroom farm will help you to determine the ones that are safe and nutritious and can be used for daily purposes and also the ones that are devoted to medicinal purposes.

Most types of mushrooms grow in dark and damp places. Some species prefer temperatures that are as low as the 70s but most have a preference that is the 60s. If there is no damp and dark vault with a steady temperature you can still grow mushrooms pretty well in conditions similar to a damp region of forest quite successfully.

Where ever you decide to grow mushrooms it is vital to make sure that spores from different mushrooms in the area do not infiltrate the growth medium. You should be very careful with it because for one it takes away very important nutrients from the mushrooms of interest and secondly you might end up growing lethal mushrooms and might not even know that it has happened and that they are poisonous until later.

It is crucial to keep tools sterilized in order to avoid moulds, mildew, and another fungus from polluting the growing area. Mushroom farmers usually keep a spray bottle that has 70% rubbing alcohol on hand and sterilized gloves.

If you need to spray the mushrooms or soil with water you need to first clean the sprayer nozzle with rubbing alcohol so that it kills any germs or other organisms that can be harmful.

As you might want to grow numerous types of mushrooms it may be advisable to simply buy pre-designed tools and actual mushroom spores plus all trays and growth mediums. In order to cultivate mushrooms at home, you need some specific materials and supplies. Usually, these materials and supplies are cheap and easy to come by. The cultivation of mushrooms is not

very difficult. They do not require a lot of knowledge or materials to grow your own mushrooms. Also, the supplies you will need are not expensive and are generally fairly easy to get. The following list of items will give an idea of the standard supplies needed for growing mushrooms. Sometimes these might vary and a few procedures might require different tools and supplies.

- Purify trays of 20 x 20 in size or poly bags based on the specifications of the species.
- Fill up tray or bag with sterilized growth medium. Look at the table for growth mediums for chosen mushrooms.
- Growth medium needs to be set at an appropriate temperature to enhance the growing process. A warming cloth can be used to increase substrate heat and you need to make sure that the room stays at the preferred temperature.
- Feasible spores may be composed of fresh mushrooms that are bought from the market. It is essential to be sure to choose a foundation that is not polluted with fungus or spores from harmful mushroom species (look below for information on how to gather and stock up mushroom spores.)
- Organize spores by scratching from spore print paper in hygienic room temperature water in a decontaminated flask.
- Mix spore-filled water with sterile vermiculite
- Use a germ-free syringe to cover the growth medium with spores but should not place soil on top of the spore material.
- Compost needs to be kept at approximately 70-degree temperature until white roots (mycelium) appear in the growth mix.
- Once evidence of growth is seen you need to keep the temperature in the low 60s and cover box with a clean plastic wrap or damp cloth.
- Cover mycelium with 1“ of fine potting soil.
- Compost should be kept soggy, but not drenched.

- Different types of mushrooms work differently, some will be ready to harvest in just a few days and others might take months or years.

Chapter 7 - Choosing Which Mushroom to Grow

The process of deciding "which mushroom to choose for growing" is often considered to be a difficult process, but it's not. The choice of mushroom heavily depends on the growing medium available, as different mushrooms have different growing mediums. The choice of mushroom, also depends on what type of farmer you are? If you are a beginner or an intermediate grower, try to start out by growing Gourmet Mushrooms such as Shiitake and Oyster. Oyster Mushrooms can survive in various temperature and also considered as one of the easiest types of mushrooms to grow at home. On the other hand, if you are just getting started with log cultivation, then Shiitake Mushrooms will be the right choice for you, as they are really easy to grow and really delicious in terms of taste.

Gourmet mushrooms, such as shiitake and oyster are considered to be a favourite of small scale farmers, as they are one of the greatest cash crops. Gourmet mushrooms are often grown outdoors, but recently farmers have started growing these mushrooms indoors by using straw or sawdust instead of logs.

There are several reasons for growing gourmet mushrooms, but among them, the two main reasons are, by growing at home or inside we can keep the heat, moisture, and light under control and can be set precisely to the needs of the mushrooms. This will, in turn, lead to larger harvests and can give higher returns than from those that are log-grown mushrooms. Secondly, by being able to control the growing conditions, farmers will be able to grow up to six crops per year and it all in the same place. This will give a better income and a balanced cash flow.

Oyster and Shiitake mushrooms are both established to be the best retailer mushrooms in the market and are well known to customers and they love them. New farmers should stick to these two. However, there is another unusual mushroom that can be grown as well and is frequently used for medicinal purposes but to grow them takes more skill along with better knowledge of the marketplace in order to find prospective buyers.

As both oyster and shiitake mushrooms are grown indoors for profit, it considered better to grow them indoors as it is easier to carefully control the temperature and humidity and so that rapid growth can be encouraged in the

“fruiting” room. The mushrooms appear in “blooms,” and the first bloom is the largest one. That is the right time for the initial harvest. However, there can be many more blooms after the first one but the quantity of harvest-able mushrooms tends to become smaller and that is why many growers just harvest the first one.

Both of these mushrooms are at their finest form when fresh-picked so most are sold to resident clients. After the harvest, the mushrooms are delivered to different places like the local chefs, food co-ops, grocery stores and some are directly sold to consumers at the farmer’s market. As gourmet mushrooms do not ship well most of them are sold fresh to local buyers. This is a very good opportunity for small mushroom farmers as they do not have to compete with the big suppliers out of state.

Some popular products that can be made from these are mushroom jerky for vegetarians, pickled mushrooms, mushroom seasonings, dehydrated mushrooms and mushroom growing kits etc.

According to research, both oyster and shiitake mushrooms have a strong nutritional and medicinal punch. Some of their benefits include: They are high in zinc, potassium, calcium, vitamin C, niacin, and vitamins B1 and B2. They have antioxidant properties that protect cells in the body. Scientific studies have also found that the shiitake mushroom can deliver antiviral, cholesterol-lowering and cardiovascular care, in addition to that it helps to boost the immune system in a way that may have cancer-preventing properties.

Mushrooms are a member of the fungus family that also includes yeasts that are used to make beer and wine, and some forms are used to make penicillin and flavour cheese. Other than generating seeds like many plants out there mushrooms produce spores. These are then collected and grown on rye grain until the grain is “inhabited” or taken over by the growing mushroom plant called the “spawn,” the inhabited grain is used to infuse a “substrate,” typically wheat straw or hardwood sawdust. The growing mushroom spreads and produces fruit known as mushrooms.

The time span for a series of crops is not long and it takes about six weeks to harvest, farmers can make a decent and balanced income in a limited space. Using an enclosed bag system most growers are generating 25 pounds of

mushrooms per square foot of growing space each year. Say you have a small yard that is only the size of 12’ by 12’ even that can be utilized to grow mushrooms. You can get a yield of 3600 pounds of oyster or shiitake mushrooms in a year by using only 144 square feet of space. You can then sell half of your crop at $12 per pound that is the retail rate and the rest you can sell at the wholesale price that is $6 per pound. Then your total income will be around $32,000. Seems quite productive.

Farmers are able to produce a huge amount of mushrooms in a very little space and it is the best “cash crop” for someone who does not own a huge plot for growing a conventional crop like flowers or herbs. It takes only about a few minutes a day to check your crop once the injected mushroom substrate is packed in the plastic bags. At least half of the small gourmet mushroom growers have other jobs or they grow other crops along with mushrooms or are even retired and are not willing or unable to work full time anymore. Hence it is very possible to make money working part-time as a mushroom grower.

Small commercial growers mostly only grow their mushrooms inside in a sterilized substrate such as straw or sawdust so that there is no impurity from other wild mushroom spores. Once the mushrooms have almost finished their fruiting, the straw or sawdust is added to a compost pile at that point there will be more “blooms” of mushrooms to pick but by then the yield will still be very low.

Chapter 8 - Mushroom Seasons

Every season has specific mushroom growths, as different types of mushrooms fruits at different seasons of the year. Therefore knowing about the mushroom fruit seasons is important knowledge which every mushroom grower should have.

For an outdoor straw bed, which is planted at the start of Summer, will be ready by the end of Summer. Therefore the choice of Summer or Fall Mushrooms, may is considered a great choice. In any case, if you are planning on growing different seasonal mushrooms, then you should probably get some knowledge about their fruit season, for example, morel mushrooms only fruit in spring.

As seasons dictate what mushroom will fruit when you should be aware of their fruit seasons. If you plan on cultivating indoor, then you don't need to worry as much about the season, but the right growing conditions must be simulated. For example, Reishi mushrooms will only fruit in summer, therefore before starting the growing process, you must know that these mushrooms like warm environments, so the temperature of the indoor environment must be adjusted accordingly. On the other hand, in the case of Spring Oyster Mushroom, which fruits in spring, the room temperature doesn't need to be as warm, which makes them a good choice for colder climates.

Below is the list of popular homegrown mushrooms, according to their fruit season.

Winter

Enokitake and Shaggy Mane.

Spring

Oyster mushrooms, Morel mushrooms, and Turkey Tails.

Mid - Summer

Garden Giant, Shiitake mushrooms, Chicken of the woods, Reishi mushrooms, and Elm oysters.

Late- Summer

Black Trumpets, Chanterelles, Pioppino, Lion's mane, Maitake mushrooms, and Button mushrooms.

Chapter 9 - Making Profit

Due to the increase in market demand for mushrooms in recent years, mushrooms are considered a high-value crop. Although growing mushrooms require different conditions and practices compared with more traditional "green" crops, mushrooms are a viable option for the small-scale grower. As with all ventures, however, research and strategy are essential if you're hoping to make a profit as a mushroom grower.

Oyster mushroom is a gourmet mushroom and is a standout among most of the moneymaking mushrooms. They have a greater appeal and growing them is extremely basic. They take around a month and a half to be grown and reaped. Henceforth it is extremely conceivable to make a profit rapidly. Additionally, there is no full-time duty required to grow the crop. Alongside growing mushrooms, you can have your day job or other duties without a problem. As long as you have a couple of hours seven days a week that you can give, you have enough time to be an effective mushroom grower.

With just 500 square foot of space, it is conceivable that you could grow 12000 pounds of mushrooms in a year. Oyster mushrooms are at present offering a rate of $6-8 a pound which is the discount cost. On the off chance that you offer 12,000 pounds of mushrooms at a rate of $6 a pound, you will be able to make $72,000 in only a year. If you are growing gourmet mushrooms then you are likely to have a profit and furthermore it is a pleasant way to make an additional income or to try and begin another occupation.

To farm a harvest like oyster mushrooms, a growing place where the temperature, humidity, and light can be adjusted, is required. A growing room enables you to deal with all three requirements for growing mushrooms at a few times a year. The key to having a successful mushroom-growing business is sanitation. There are a lot of things that could possibly contaminate your mushrooms and hence you need to be very careful and with good care, your mushrooms can grow up strong and delicious. First, it is very important to sterilize your straw growth medium to remove all possible contamination. You need to take special care and to wipe down and disinfect the surface using a 10% bleach solution once you are ready to spread out your straw to let it cool down. Then you need to wash your hands before

touching any items like your spawn or substrate. Healthy gourmet's mushrooms will get you a very high return in the marketplace but you need to ensure they are not contaminated at all.

When the gourmet mushrooms are ready to be harvested you need to sell them as early as possible. This is because fresh mushrooms give the highest return. However, if you are not able to sell your complete production on the first day or soon thereafter you can freeze or dry them so that they can be sold later. For mushrooms selling the following three options are considered by small scale growers for quick turnover :

Farmers' markets.

Farmers markets are crowded marketplace generally and people who frequent these markets are often looking to find the finest local produce from the top local growers and that supplier could also be you. Set up a booth and start selling.

Restaurants.

A lot of people like savouring tasty fresh mushrooms when they go to a restaurant. Restaurants need to buy those mushrooms from somewhere and that person could be you. Give out samples for free to chefs at the local restaurants and this might generate some sales for your gourmet mushrooms.

Grocery stores.

Most Grocery Stores get their mushrooms from out of state distributors. If your gourmet mushrooms are garden-fresh, healthy and delicious then it could become your business to sell it to them and get a good profit out of it.

Chapter 10 - Conclusion

All the contents provided by the author in this book has been provided with the sole purpose of providing knowledge to those who intend to start their own mushroom farm in order to make some cash. A mushroom cultivating business can be a means of generating income in only fourteen days with extremely low startup capital to begin a business. A who has researched some of the innovations in the development of mushroom farms and has a penchant for working a small farm, the mushroom business might be the ideal place for him to start his farming industry. The development of mushrooms takes a little craftsmanship and requires both research and understanding of the process. Experience can be gained by working on other farms or through trial and error on your own. the You can contact ICAR-Directorate of Mushroom Exploration to learn about mushroom cultivating at their site before beginning a private venture of mushroom cultivating as well as ensuring you have a marketable strategy for selling your products.

The author furthermore suggests that if u want to start your own mushroom farm, work out a detailed budget, draft your strategy, note your aims and objectives, be specific about the variety which you want to grow, and have a clear idea about your target market. This should hopefully be enough to help anyone start a profitable mushroom farm.

-- Eugene Charlton

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